# Federal Operating Permit Article 1

This permit is based upon the requirements of Title V of the Federal Clean Air Act and Chapter 80, Article 1 of the Commonwealth of Virginia Regulations for the Control and Abatement of Air Pollution. Until such time as this permit is reopened and revised, modified, revoked, terminated or expires, the permittee is authorized to operate in accordance with the terms and conditions contained herein. This permit is issued under the authority of Title 10.1, Chapter 13, §10.1-1322 of the Air Pollution Control Law of Virginia. This permit is issued consistent with the Administrative Process Act, and 9 VAC 5-80-50 through 9 VAC 5-80-300 of the State Air Pollution Control Board Regulations for the Control and Abatement of Air Pollution of the Commonwealth of Virginia.

Authorization to operate a Stationary Source of Air Pollution as described in this permit is hereby granted to:

Permittee Name: Frederick County

Facility Name: Frederick County Regional Landfill

Facility Location: 280 Landfill Road

Frederick County, Virginia

Registration Number: 81312 Permit Number: VRO81312

September 30, 2004

Effective Date

September 29, 2009

**Expiration Date** 

Director, Department of Environmental Quality

September 2, 2004

Signature Date

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### I. Facility Information

#### Permittee

Frederick County 107 N. Kent Street Winchester, Virginia 22601-5000

#### **Responsible Official**

John R. Riley, Jr. County Administrator

#### **Facility**

Frederick County Regional Landfill 280 Landfill Road Frederick County, Virginia

#### **Contact Person**

Ronnel V. Kimble, Jr. Environmental Manager (540) 665-5658

Plant Identification Number: 51-139-0127

Facility Description: SIC Code 4953 – Refuse Systems

The Frederick County Regional Landfill is a municipal solid waste (MSW) management facility. The landfill accepts household and commercial waste, construction / demolition / debris (CDD) and sludge. The site includes an active landfill located south of Route 655 (Permit No. 529), a closed landfill south of the active landfill and west of Opequon Creek (Permit No. 40), and a CDD landfill located southwest of the closed landfill (Permit No. 591). The parcels containing these three waste management units are contiguous and county-owned property, hence all three landfills are considered as a single disposal facility.

## **II.** Emission Units

Equipment to be operated consists of:

Emission Unit ID	Stack ID	Emission Unit Description	Size/Rated Capacity*	Pollution Control Device Description (PCD)	PCD ID	Pollutant Controlled	Applicable Permit Date
Landfills	Landfills						
EU-1	F-1	Closed MSW Landfill Solid Waste Permit No. 40	1.4 Million Megagrams	-	-	-	-
EU-2	F-2	Active MSW Landfill Solid Waste Permit No. 529	5.9 Million m <sup>3</sup>	-	-	-	-
EU-3	F-3	CDD Landfill Solid Waste Permit No. 591	4.7 Million yd <sup>3</sup>	-	-	-	-
Landfill S	Landfill Surface and Roads						
EU-4	F-4	Landfill Surface and Roads	-	-	-	-	-
Fuel Burning Equipment							
PCD-1	F-5	8-inch Utility Flare	40.9 MMBtu/hr	-	-	NMOC and VOC	03/24/03

<sup>\*</sup> The Size/Rated capacity is provided for informational purposes only, and is not an applicable requirement

### III. Landfill Requirements – (Emission Units: EU-1, EU-2 and EU-3)

#### A. Limitations

1. The design capacities of the landfills are as follows:

Closed MSW Landfill, Solid Waste Permit No. 40 (EU-1) - 1.4 Million Megagrams

Active MSW Landfill, Solid Waste Permit No. 529 (EU-2) - 5.9 Million m<sup>3</sup>

CDD Landfill, Solid Waste Permit No. 591 (EU-3) - 4.7 Million yd<sup>3</sup>

A change in the design capacity shall require the permittee to submit an amended design capacity report to the Director, Valley Region, as described in Condition III.D.1.

(9 VAC 5-80-110 and 40 CFR §60.757)

- 2. If the reported nonmethane organic compounds (NMOC) emission rate in Conditions III.D.2 and III.D.3 is equal to or greater than 50 megagrams per year, the permittee shall:
  - a. Submit a collection and control system design plan prepared by a professional engineer within one year of the NMOC emission report, and install a collection and control system within 30 months of the NMOC emission report in compliance with 40 CFR §60.752 (b) (2), or
  - b. Determine the site-specific methane generation rate constant using the procedure specified in Condition III.C.2 and calculate the NMOC emission rate. The NMOC emission rate calculations shall be done using the equations in Condition III.B.1 and using the site-specific methane generation rate constant and site specific NMOC concentrations. The calculation of the methane generation rate constant is performed only once, and the value obtained is used in all subsequent annual NMOC emission rate calculations.

(9 VAC 5-80-110 and 40 CFR §60.757)

3. If the NMOC mass emission rate as calculated in Condition III.A.2.b is equal to or greater than 50 megagrams per year, the permittee shall submit a collection and control system design plan prepared by a professional engineer within one year of the NMOC emission report, and install a collection and control system within 30 months of the NMOC emission report in compliance with 40 CFR§60.752 (b) (2). (9 VAC 5-80-110 and 40 CFR §60.757)

#### B. Monitoring and Recordkeeping

- 1. The permittee shall use either of the following equations (Equation 1 or Equation 2) to calculate the NMOC emission rate. The default values to be used in both equations are 0.05 per year for k and 170 cubic meters per megagram for  $L_{\rm O}$ . The current site-specific  $C_{\rm NMOC}$  is 110 parts per million by volume as hexane. This and future site-specific  $C_{\rm NMOC}$  values, as determined by Condition III.C.1, shall be used in calculating the NMOC emission rate. If obtained, the site-specific k value as determined by using the procedure specified in Condition III.C.2, shall be used in lieu of the default value for k in calculating the NMOC emission rate.
  - a. Equation 1 shall be used if the actual year-to-year solid waste acceptance rate is known:

$$M_{NMOC} = \sum_{i=1}^{n} 2kL_{O}M_{i}(e^{-kt_{i}})(C_{NMOC})(3.6x10^{-9})$$

.....Equation 1

 $M_{NMOC}$  = total NMOC emission rate from the landfill, megagrams per year

k = methane generation rate constant, year<sup>-1</sup>

L<sub>o</sub> = methane generation potential, cubic meters per megagram solid waste

 $M_i$  = mass of solid waste in the i<sup>th</sup> section, megagrams

 $t_i$  = age of the  $i^{th}$  section, years

 $C_{NMOC}$  = concentration of NMOC, parts per million by volume as hexane

 $3.6 \times 10^{-9} = conversion factor$ 

The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

b. Equation 2 shall be used if the actual year-to-year solid waste acceptance rate is unknown:

$$M_{NMOC} = 2L_0 R(e^{-kc} - e^{-kt})(C_{NMOC})(3.6x10^{-9})$$

.....Equation 2

 $M_{NMOC}$  = mass emission rate of NMOC from the landfill, megagrams per year  $L_{O}$  = methane generation potential, cubic meters per megagram solid waste

R = average annual acceptance rate, megagrams per year

k = methane generation rate constant, year<sup>-1</sup>

t = age of the landfill, years

 $C_{NMOC} = concentration of NMOC$ , parts per million by volume as hexane c = time since closure, years (for an active landfill c = 0 and  $e^{-kc} = 1$ )  $3.6x10^{-9} = conversion factor$ 

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for R if documentation of the nature and amount of such wastes is maintained.

(9 VAC 5-80-110 and 40 CFR §60.758)

- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Region. These records shall be maintained for each landfill (EU1 EU3) and shall include, but are not limited to:
  - a. Readily accessible, on-site records of the maximum design capacity.
  - b. Mass emission rate of NMOC from the landfill to include the current 5 years or annual NMOC emission rate.
  - c. The current amount of solid waste in-place.
  - d. The year-by-year or average waste acceptance rate.
  - e. Site-specific values for  $C_{NMOC}$  and k, if obtained.
  - f. Age of landfill.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

(9 VAC 5-80-110 and 40 CFR §60.758)

#### C. Testing

1. The permittee shall determine the Tier 2 site-specific NMOC concentration using the following sampling procedure. The permittee shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The permittee shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C of Appendix A of 40 CFR Part 60 or Method 18 of Appendix A of 40 CFR Part 60. If using Method 18 of Appendix A of 40 CFR Part 60, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The permittee shall divide the NMOC concentration from Method 25C of Appendix A of 40 CFR Part 60 by six to convert from C<sub>NMOC</sub> as

carbon to C<sub>NMOC</sub> as hexane. (9 VAC 5-80-110 and 40 CFR §60.754 (a)(3))

- 2. The Tier 3 site-specific methane generation rate constant shall be determined using the procedure provided in 40 CFR Part 60, Appendix A, Method 2E. (9 VAC 5-80-110 and 40 CFR §60.754 (a)(4))
- 3. The permittee may use other methods to determine the NMOC concentration or a site-specific methane rate generation constant as an alternative to the methods required in Conditions III.C.1 and III.C.2 if the method has been approved by the EPA.

(9 VAC 5-80-110 and 40 CFR §60.754 (a)(5))

#### **D.** Reporting

1. The permittee shall submit an amended design capacity report to the Director, Valley Region, providing notification of an increase in the design capacity of the landfill, whether the increase results from an increase in the permitted area or depth of the landfill, a change in the operating procedures, or any other means which results in an increase in the maximum design capacity of the landfill. The amended design capacity report shall be submitted within 90 days of the issuance of an amended construction or operating permit, or the placement of waste in additional land, or the change in operating procedures which will result in an increase in maximum design capacity, whichever occurs first.

(9 VAC 5-80-110 and 40 CFR §60.757 (b))

- 2. The permittee shall determine and report to the Director, Valley Region, the site-specific NMOC concentration using the procedure specified in Condition III.C.1 by May 28, 2007 and calculate the revised NMOC estimate rate using the equations specified in Condition III.B.1. If the NMOC emission rate calculated is less than 50 megagrams per year, then the permittee shall submit an annual emission rate report until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The estimated NMOC emission rate shall include all the data, calculations, sample reports and measurements used to estimate the emissions. The Director, Valley Region, may request such additional information as may be necessary to verify the reported NMOC emission rate.

  (9 VAC 5-80-110 and 40 CFR §60.757)
- 3. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the five-year estimate submitted on March 19, 2003, a revised NMOC estimate shall be submitted to the Director, Valley Region. The revised estimate shall cover the five-year period beginning with the year in which the actual waste acceptance exceeded the estimated waste acceptance rate and shall be submitted within 180 days of the first exceedance of estimated waste acceptance rate. If the NMOC emission rate calculated is less than 50 megagrams per year, then the permittee shall submit an annual emission rate report until the calculated emission

rate is equal to or greater than 50 megagrams per year or the landfill is closed. The estimated NMOC emission rate shall include all the data, calculations, sample reports and measurements used to estimate the emissions. The Director, Valley Region, may request such additional information as may be necessary to verify the reported NMOC emission rate.

(9 VAC 5-80-110 and 40 CFR §60.757)

- 4. If the estimated NMOC emission rate as reported in the annual report to DEQ under Conditions III.D.2 and III.D.3 is less than 50 megagrams per year in each of the next consecutive years, the permittee may elect to submit an estimate of the NMOC emission rate for the next five-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Director, Valley Region. This estimate shall be revised at least once every five years. The Director, Valley Region, may request such additional information as may be necessary to verify the reported NMOC emission rate. (9 VAC 5-80-110 and 40 CFR §60.757)
- 5. If the permittee is required to install a gas collection and control system according to the provisions of 9 VAC 5-50-410, Subpart WWW, the permittee shall apply for a solid waste permit amendment in accordance with Part VII (9 VAC 20-80-480 et seq.) of 9 VAC 20 Chapter 80 (Solid Waste Management Regulations). (9 VAC 5-80-110)
- 6. The permittee shall submit a closure report to the Director, Valley Region, within 30 days of the date the MSW landfill stopped accepting waste. (9 VAC 5-80-110 and 40 CFR §60.757 (d))

### **IV.** Fuel Burning Equipment - (Emission Unit: PCD-1)

#### A. Limitations

1. The approved fuel for the utility flare is landfill gas (LFG). Propane gas may be used as fuel to ignite the pilot flame. A change in the fuel may require a permit to modify and operate.

(9 VAC 5-80-110 and Condition 4 of 03/24/03 Permit)

- 2. The utility flare shall consume no more than 716 million cubic feet of LFG per year, calculated monthly as the sum of each consecutive 12 month period. (9 VAC 5-80-110 and Condition 5 of 03/24/03 Permit)
- 3. Emissions from the utility flare shall be controlled by proper operation and maintenance of the utility flare. The operators shall be trained in the proper operation of all such equipment. Training shall consist of a review and familiarization of the manufacturer's operating instructions, at minimum. The permittee shall maintain records of the required training including a statement of time, place and nature of training provided. The permittee shall have available good written operating procedures and a maintenance schedule for the utility flare. These procedures shall be based on the manufacturer's recommendations, at minimum. All records required by this condition shall be kept on site and made available for inspection by the DEQ. (9 VAC 5-80-110 and Condition 6 of 03/24/03 Permit)
- 4. Emissions from the operation of the utility flare shall not exceed the limits specified below:

Particulate Matter	0.7	lbs/hr	3.0	tons/yr
PM-10	0.7	lbs/hr	3.0	tons/yr
Sulfur Dioxide	0.6	lbs/hr	2.7	tons/yr
Nitrogen Oxides (as NO <sub>2</sub> )	2.8	lbs/hr	12.2	tons/yr
Carbon Monoxide	15.1	lbs/hr	66.2	tons/yr

(9 VAC 5-80-110 and Condition 7 of 03/24/03 Permit)

5. The utility flare shall be designed for and operated with no visible emissions, except for periods not to exceed a total of five minutes during any two consecutive hours. (9 VAC 5-80-110 and Condition 8 of 03/24/03 Permit)

#### **B.** Monitoring and Recordkeeping

The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Region. These records shall include, but are not limited to:

- a. Monthly and annual throughput of LFG in cubic feet. Annual throughput shall be calculated monthly as the sum of each consecutive 12-month period.
- b. Scheduled and unscheduled maintenance, and operator training.
- c. The results of all visible emission evaluations.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. (9 VAC 5-80-110 and Condition 9 of 03/24/03 Permit)

#### C. Testing

- 1. The permitted utility flare shall be constructed so as to allow for emissions testing upon reasonable notice at any time, using appropriate methods. Test ports shall be provided when requested at the appropriate locations.

  (9 VAC 5-80-110 and Condition 3 of 03/24/03 Permit)
- 2. If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)	
Visible Emission	EPA Method 9	
PM and PM-10	EPA Method 5	
VOC	EPA Methods 18, 25, and 25a	
$NO_x$	EPA Methods 7 and 20	
$SO_2$	EPA Method 6	
СО	EPA Method 10	

### V. Facility Wide Conditions

#### A. Limitations

1. Visible emissions from the facility shall not exceed 20% opacity except during one six-minute period in any one hour in which visible emissions shall not exceed 30% opacity.

(9 VAC 5-50-80 and 9 VAC 5-80-110)

- 2. The permittee shall take reasonable precautions to prevent fugitive dust from becoming air borne. Such reasonable precautions shall include the following as a minimum:
  - a. Dust from grading, cell construction, waste compaction, application of daily cover, wood waste chipping operations, storage piles and traffic areas shall be controlled by wet suppression or equivalent (as approved by the DEQ) control measures.
  - b. All material being stockpiled shall be kept moist to control dust during storage and handling, or covered to minimize emissions.
  - c. Dust from haul roads shall be controlled by wet suppression and prompt removal of dried sediment resulting from soil erosion and dirt spilled or tracked onto paved surfaces within the landfill.
  - d. Reasonable precautions shall be taken to prevent deposition of dirt on public roads and subsequent dust emissions. Dirt spilled or tracked onto paved surfaces shall be promptly removed to prevent particulate matter from becoming airborne.

(9 VAC 5-50-90 and 9 VAC 5-80-110)

- 3. The permittee shall maintain a DEQ-approved Dust Control Plan which outlines the preventive measures to be implemented for dust control at the landfill. This plan shall include the following as a minimum:
  - a. Identification of the personnel responsible for overseeing dust control.
  - b. Description and the frequency of measures to be taken to prevent excess emissions from grading, cell construction, waste compaction and daily cover application.
  - c. Description and the frequency of measures to be taken to prevent excess emissions from storage piles and stockpiling operations.

- d. Description and the frequency of measures to be taken to prevent dust from haul roads and other unpaved surfaces.
- e. Description and the frequency of measures to be taken to prevent deposition of dirt on paved surfaces within the landfills and access roads entering the landfill.

Any changes in the practices and procedures followed by the permittee shall be documented and submitted for DEQ approval within 90 days of the effective date of the changes.

(9 VAC 5-80-110)

#### B. Monitoring and Recordkeeping

- 1. At least daily, the permittee shall visually survey the trafficable roads at the site and land fill activities for any sources of excessive fugitive emissions. For the purpose of this survey, excessive emissions are considered to be any visible emissions that leave the facility site boundaries. The presence of excessive fugitive emissions shall require further investigation as to the cause of the emissions and timely corrective action shall be taken. If water is used to control the fugitive dust emissions, the permittee shall take care not to create a water quality problem from surface water runoff. All observations and corrective actions taken shall be logged and recorded. (9 VAC 5-80-110)
- 2. The permittee shall maintain records of all emission data and operating parameters necessary to demonstrate compliance with this permit. The content of and format of such records shall be arranged with the Director, Valley Regional Office. These records shall include, but are not limited to:
  - a. A copy of the DEQ-approved Dust Control Plan.
  - b. Daily logs of the visual survey of the trafficable roads at the site and landfill activities to include the following:
    - (1) The date, time, and name of the person performing each inspection;
    - (2) Whether or not excessive fugitive emissions are observed and the suspected cause of such emissions; and
    - (3) The date, time, and type of corrective actions taken.

These records shall be available for inspection by the DEQ and shall be current for the most recent five years.

(9 VAC 5-80-110)

### C. Testing

If testing is conducted in addition to the monitoring specified in this permit, the permittee shall use the following methods in accordance with procedures approved by the DEQ as follows:

Pollutant	Test Method (40 CFR Part 60, Appendix A)
Visible Emission	EPA Method 9 and 22

(9 VAC 5-80-110)

### VI. Insignificant Emission Units

The following emission units at the facility are identified in the application as insignificant emission units under 9 VAC 5-80-720:

Emission Unit No.	Emission Unit Description	Citation	Pollutant(s) Emitted (9 VAC 5-80-720 B)	Rated Capacity (9 VAC 5-80-720 C)
EU-5	Leachate Lagoon	9 VAC 5-80-720 B	VOC	-
EU-6	Compost Chipper	9 VAC 5-80-720 B	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM-10 and VOC	-
EU-7	Tire Chipper	9 VAC 5-80-720 B	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM-10 and VOC	-
EU-8	Fuel Storage Tanks	9 VAC 5-80-720 B	VOC	-
EU-9	Landfill Gas Fueled Heater	9 VAC 5-80-720 B	NO <sub>x</sub> , CO, SO <sub>2</sub> , PM-10 and VOC	-

These emission units are presumed to be in compliance with all requirements of the federal Clean Air Act as may apply. Based on this presumption, no monitoring, recordkeeping, or reporting shall be required for these emission units in accordance with 9 VAC 5-80-110.

### VII. Permit Shield & Inapplicable Requirements

Compliance with the provisions of this permit shall be deemed compliance with all applicable requirements in effect as of the permit issuance date as identified in this permit. This permit shield covers only those applicable requirements covered by terms and conditions in this permit and the following requirements which have been specifically identified as being not applicable to this permitted facility:

Citation	Title of Citation	Description of Applicability
40 CFR 63, Subpart AAA	National Emission Standards for Hazardous Air Pollutants for Municipal Solid Waste Landfills	This standard does not apply because this facility is not (1) a major source of Hazardous Air Pollutants (HAP); (2) collocated with a major source of HAP; (3) an area source with a design capacity greater than or equal to 2.5 million m³ and 2.5 million Mg with estimated uncontrolled NMOC emissions equal to or greater than 50 Mg/yr; or (4) an active area source landfill with a design capacity greater than or equal to 2.5 million m³ and 2.5 million Mg that operates an anaerobic bioreactor.

Nothing in this permit shield shall alter the provisions of §303 of the federal Clean Air Act, including the authority of the administrator under that section, the liability of the owner for any violation of applicable requirements prior to or at the time of permit issuance, or the ability to obtain information by the administrator pursuant to §114 of the federal Clean Air Act, (ii) the Board pursuant to §10.1-1314 or §10.1-1315 of the Virginia Air Pollution Control Law or (iii) the Department pursuant to §10.1-1307.3 of the Virginia Air Pollution Control Law. (9 VAC 5-80-140)

#### VIII. General Conditions

#### A. Federal Enforceability

All terms and conditions in this permit are enforceable by the administrator and citizens under the federal Clean Air Act, except those that have been designated as only state-enforceable.

(9 VAC 5-80-110 N)

### **B.** Permit Expiration

This permit has a fixed term of five years. The expiration date shall be the date five years from the date of issuance. Unless the owner submits a timely and complete application for renewal to the Department consistent with the requirements of 9 VAC 5-80-80, the right of the facility to operate shall be terminated upon permit expiration.

- 1. The owner shall submit an application for renewal at least six months but no earlier than eighteen months prior to the date of permit expiration.
- 2. If an applicant submits a timely and complete application for an initial permit or renewal under this section, the failure of the source to have a permit or the operation of the source without a permit shall not be a violation of Article 1, Part II of 9 VAC 5 Chapter 80, until the Board takes final action on the application under 9 VAC 5-80-150.
- 3. No source shall operate after the time that it is required to submit a timely and complete application under subsections C and D of 9 VAC 5-80-80 for a renewal permit, except in compliance with a permit issued under Article 1, Part II of 9 VAC 5 Chapter 80.
- 4. If an applicant submits a timely and complete application under section 9 VAC 5-80-80 for a permit renewal but the Board fails to issue or deny the renewal permit before the end of the term of the previous permit, (i) the previous permit shall not expire until the renewal permit has been issued or denied and (ii) all the terms and conditions of the previous permit, including any permit shield granted pursuant to 9 VAC 5-80-140, shall remain in effect from the date the application is determined to be complete until the renewal permit is issued or denied.
- 5. The protection under subsections F 1 and F 5 (ii) of section 9 VAC 5-80-80 F shall cease to apply if, subsequent to the completeness determination made pursuant to section 9 VAC 5-80-80 D, the applicant fails to submit by the deadline specified in writing by the Board any additional information identified as being needed to process the application.

(9 VAC 5-80-80 B, C and F, 9 VAC 5-80-110 D and 9 VAC 5-80-170 B)

#### C. Recordkeeping and Reporting

- 1. All records of monitoring information maintained to demonstrate compliance with the terms and conditions of this permit shall contain, where applicable, the following:
  - a. The date, place as defined in the permit, and time of sampling or measurements.
  - b. The date(s) analyses were performed.
  - c. The company or entity that performed the analyses.
  - d. The analytical techniques or methods used.
  - e. The results of such analyses.
  - f. The operating conditions existing at the time of sampling or measurement.
  - (9 VAC 5-80-110 F)
- 2. Records of all monitoring data and support information shall be retained for at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

  (9 VAC 5-80-110 F)
- 3. The permittee shall submit the results of monitoring contained in any applicable requirement to DEQ no later than <u>March 1</u> and <u>September 1</u> of each calendar year. This report must be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:
  - a. The time period included in the report. The time periods to be addressed are January 1 to June 30 and July 1 to December 31.
  - b. All deviations from permit requirements. For purposes of this permit, deviations include, but are not limited to:
    - (1) Exceedance of emissions limitations or operational restrictions;
    - (2) Excursions from control device operating parameter requirements, as documented by continuous emission monitoring, periodic monitoring, or compliance assurance monitoring which indicates an exceedance of emission limitations or operational restrictions; or,
    - (3) Failure to meet monitoring, recordkeeping, or reporting requirements contained in this permit.

c. If there were no deviations from permit conditions during the time period, the permittee shall include a statement in the report that "no deviations from permit requirements occurred during this semi-annual reporting period."

(9 VAC 5-80-110 F)

#### **D.** Annual Compliance Certification

Exclusive of any reporting required to assure compliance with the terms and conditions of this permit or as part of a schedule of compliance contained in this permit, the permittee shall submit to EPA and DEQ no later than March 1 each calendar year a certification of compliance with all terms and conditions of this permit including emission limitation standards or work practices. The compliance certification shall comply with such additional requirements that may be specified pursuant to §114(a)(3) and §504(b) of the federal Clean Air Act. This certification shall be signed by a responsible official, consistent with 9 VAC 5-80-80 G, and shall include:

- 1. The time period included in the certification. The time period to be addressed is January 1 to December 31.
- 2. The identification of each term or condition of the permit that is the basis of the certification.
- 3. The compliance status.
- 4. Whether compliance was continuous or intermittent, and if not continuous, documentation of each incident of non-compliance.
- 5. Consistent with subsection 9 VAC 5-80-110 E, the method or methods used for determining the compliance status of the source at the time of certification and over the reporting period.
- 6. Such other facts as the permit may require to determine the compliance status of the source.

One copy of the annual compliance certification shall be sent to EPA at the following address:

Clean Air Act Title V Compliance Certification (3AP00) U. S. Environmental Protection Agency, Region III 1650 Arch Street Philadelphia, PA 19103-2029.

(9 VAC 5-80-110 K.5)

#### **E.** Permit Deviation Reporting

The permittee shall notify the Director, Valley Region, within four daytime business hours, after discovery of any deviations from permit requirements which may cause excess emissions for more than one hour, including those attributable to upset conditions as may be defined in this permit. In addition, within 14 days of the discovery, the permittee shall provide a written statement explaining the problem, any corrective actions or preventative measures taken, and the estimated duration of the permit deviation. The occurrence should also be reported in the next semi-annual compliance monitoring report pursuant to General Condition VIII.C.3 of this permit.

(9 VAC 5-80-110 F.2 and 9 VAC 5-80-250)

#### F. Failure/Malfunction Reporting

In the event that any affected facility or related air pollution control equipment fails or malfunctions in such a manner that may cause excess emissions for more than one hour, the owner shall, as soon as practicable but no later than four daytime business hours after the malfunction is discovered, notify the Director, Valley Region, by facsimile transmission, telephone or telegraph of such failure or malfunction and shall within 14 days of discovery provide a written statement giving all pertinent facts, including the estimated duration of the breakdown. When the condition causing the failure or malfunction has been corrected and the equipment is again in operation, the owner shall notify the Director, Valley Region. (9 VAC 5-20-180 C)

### G. Severability

The terms of this permit are severable. If any condition, requirement or portion of the permit is held invalid or inapplicable under any circumstance, such invalidity or inapplicability shall not affect or impair the remaining conditions, requirements, or portions of the permit.

(9 VAC 5-80-110 G.1)

#### H. Duty to Comply

The permittee shall comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the federal Clean Air Act or the Virginia Air Pollution Control Law or both and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or, for denial of a permit renewal application.

(9 VAC 5-80-110 G.2)

#### I. Need to Halt or Reduce Activity not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

(9 VAC 5-80-110 G.3)

#### J. Permit Modification

A physical change in, or change in the method of operation of, this stationary source may be subject to permitting under State Regulations 9 VAC 5-80-50, 9 VAC 5-80-1100, 9 VAC 5-80-1790, or 9 VAC 5-80-2000 and may require a permit modification and/or revisions except as may be authorized in any approved alternative operating scenarios. (9 VAC 5-80-190 and 9 VAC 5-80-260)

#### **K.** Property Rights

The permit does not convey any property rights of any sort, or any exclusive privilege. (9 VAC 5-80-110 G.5)

#### L. Duty to Submit Information

- 1. The permittee shall furnish to the Board, within a reasonable time, any information that the Board may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Board copies of records required to be kept by the permit and, for information claimed to be confidential, the permittee shall furnish such records to the Board along with a claim of confidentiality.
  - (9 VAC 5-80-110 G.6)
- 2. Any document (including reports) required in a permit condition to be submitted to the Board shall contain a certification by a responsible official that meets the requirements of 9 VAC 5-80-80 G. (9 VAC 5-80-110 K.1)

#### M. Duty to Pay Permit Fees

The owner of any source for which a permit under 9 VAC 5-80-50 through 9 VAC 5-80-300 was issued shall pay permit fees consistent with the requirements of 9 VAC 5-80-310 through 9 VAC 5-80-350. The actual emissions covered by the permit program fees for the preceding year shall be calculated by the owner and submitted to the Department by **April 15** of each year. The calculations and final amount of emissions are subject to verification and final determination by the Department. (9 VAC 5-80-110 H and 9 VAC 5-80-340 C)

#### N. Fugitive Dust Emission Standards

During the operation of a stationary source or any other building, structure, facility, or installation, no owner or other person shall cause or permit any materials or property to be handled, transported, stored, used, constructed, altered, repaired, or demolished without taking reasonable precautions to prevent particulate matter from becoming airborne. Such reasonable precautions may include, but are not limited to, the following:

- 1. Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of land;
- 2. Application of asphalt, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which may create airborne dust; the paving of roadways and the maintaining of them in a clean condition;
- 3. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty material. Adequate containment methods shall be employed during sandblasting or other similar operations;
- 4. Open equipment for conveying or transporting material likely to create objectionable air pollution when airborne shall be covered or treated in an equally effective manner at all times when in motion; and,
- 5. The prompt removal of spilled or tracked dirt or other materials from paved streets and of dried sediments resulting from soil erosion.

(9 VAC 5-40-90 and 9 VAC 5-50-90)

#### O. Startup, Shutdown, and Malfunction

At all times, including periods of startup, shutdown, soot blowing, and malfunction, owners shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with air pollution control practices for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Board, which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

(9 VAC 5-50-20 E and 9 VAC 5-40-20 E)

#### P. Alternative Operating Scenarios

Contemporaneously with making a change between reasonably anticipated operating scenarios identified in this permit, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating. The permit shield described

in 9 VAC 5-80-140 shall extend to all terms and conditions under each such operating scenario. The terms and conditions of each such alternative scenario shall meet all applicable requirements including the requirements of 9 VAC 5 Chapter 80, Article 1. (9 VAC 5-80-110 J)

#### Q. Inspection and Entry Requirements

The permittee shall allow DEQ, upon presentation of credentials and other documents as may be required by law, to perform the following:

- 1. Enter upon the premises where the source is located or emissions-related activity is conducted, or where records must be kept under the terms and conditions of the permit.
- 2. Have access to and copy, at reasonable times, any records that must be kept under the terms and conditions of the permit.
- 3. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit.
- 4. Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit or applicable requirements.

(9 VAC 5-80-110 K.2)

#### **R.** Reopening For Cause

The permit shall be reopened by the Board if additional federal requirements become applicable to a major source with a remaining permit term of three years or more. Such reopening shall be completed no later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 9 VAC 5-80-80 F.

- 1. The permit shall be reopened if the Board or the administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
- 2. The permit shall be reopened if the administrator or the Board determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

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3. The permit shall not be reopened by the Board if additional applicable state requirements become applicable to a major source prior to the expiration date established under 9 VAC 5-80-110 D.

(9 VAC 5-80-110 L)

#### S. Permit Availability

Within five days after receipt of the issued permit, the permittee shall maintain the permit on the premises for which the permit has been issued and shall make the permit immediately available to DEQ upon request. (9 VAC 5-80-150 E)

#### T. Transfer of Permits

- 1. No person shall transfer a permit from one location to another, unless authorized under 9 VAC 5-80-130, or from one piece of equipment to another. (9 VAC 5-80-160)
- 2. In the case of a transfer of ownership of a stationary source, the new owner shall comply with any current permit issued to the previous owner. The new owner shall notify the Board of the change in ownership within 30 days of the transfer and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)
- 3. In the case of a name change of a stationary source, the owner shall comply with any current permit issued under the previous source name. The owner shall notify the Board of the change in source name within 30 days of the name change and shall comply with the requirements of 9 VAC 5-80-200. (9 VAC 5-80-160)

#### **U.** Malfunction as an Affirmative Defense

- 1. A malfunction constitutes an affirmative defense to an action brought for noncompliance with technology-based emission limitations if the requirements of paragraph 2 of this condition are met.
- 2. The affirmative defense of malfunction shall be demonstrated by the permittee through properly signed, contemporaneous operating logs, or other relevant evidence that show the following:
  - a. A malfunction occurred and the permittee can identify the cause or causes of the malfunction.
  - b. The permitted facility was at the time being properly operated.

- c. During the period of the malfunction the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit.
- d. The permittee notified the Board of the malfunction within two working days following the time when the emission limitations were exceeded due to the malfunction. This notification shall include a description of the malfunction, any steps taken to mitigate emissions, and corrective actions taken. The notification may be delivered either orally or in writing. The notification may be delivered by electronic mail, facsimile transmission, telephone, or any other method that allows the permittee to comply with the deadline. This notification fulfills the requirements of 9 VAC 5-80-110 F 2 b to report promptly deviations from permit requirements. This notification does not release the permittee from the malfunction reporting requirement under 9 VAC 5-20-180 C.
- 3. In any enforcement proceeding, the permittee seeking to establish the occurrence of a malfunction shall have the burden of proof.
- 4. The provisions of this section are in addition to any malfunction, emergency or upset provision contained in any applicable requirement.

(9 VAC 5-80-250)

#### V. Permit Revocation or Termination for Cause

A permit may be revoked or terminated prior to its expiration date if the owner knowingly makes material misstatements in the permit application or any amendments thereto or if the permittee violates, fails, neglects or refuses to comply with the terms or conditions of the permit, any applicable requirements, or the applicable provisions of 9 VAC 5 Chapter 80, Article 1. The Board may suspend, under such conditions and for such period of time as the Board may prescribe any permit for any of the grounds for revocation or termination or for any other violations of these regulations. (9 VAC 5-80-190 C and 9 VAC 5-80-260)

#### W. Duty to Supplement or Correct Application

Any applicant who fails to submit any relevant facts or who has submitted incorrect information in a permit application shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrections. An applicant shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete application was filed but prior to release of a draft permit.

(9 VAC 5-80-80 E)

#### X. Stratospheric Ozone Protection

If the permittee handles or emits one or more Class I or II substances subject to a standard promulgated under or established by Title VI (Stratospheric Ozone Protection) of the federal Clean Air Act, the permittee shall comply with all applicable sections of 40 CFR Part 82, Subparts A to F.

(40 CFR Part 82, Subparts A-F)

#### Y. Asbestos Requirements

The permittee shall comply with the requirements of National Emissions Statements for Hazardous Air Pollutants (40 CFR 61) Subpart M, National Emission Standards for Asbestos as it applies to the following: Standards for Demolition and Renovation (40 CFR 61.145), Standards for Insulating Materials (40 CFR 61.150). (9 VAC 5-60-70 and 9 VAC 5-80-110 A.1)

#### Z. Accidental Release Prevention

If the permittee has more, or will have more than a threshold quantity of a regulated substance in a process, as determined by 40 CFR 68.115, the permittee shall comply with the requirements of 40 CFR Part 68.

(40 CFR Part 68)

#### AA. Changes to Permits for Emissions Trading

No permit revision shall be required under any federally approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit.

(9 VAC 5-80-110 I)

#### **BB.** Emissions Trading

Where the trading of emissions increases and decreases within the permitted facility is to occur within the context of this permit and to the extent that the regulations provide for trading such increases and decreases without a case-by-case approval of each emissions trade:

- 1. All terms and conditions required under 9 VAC 5-80-110, except subsection N, shall be included to determine compliance.
- 2. The permit shield described in 9 VAC 5-80-140 shall extend to all terms and conditions that allow such increases and decreases in emissions.
- 3. The owner shall meet all applicable requirements including the requirements of 9 VAC 5-80-50 through 9 VAC 5-80-300.